

**Puget Sound Partnership**  
**Puget Sound Science Update: Frequently Asked Questions**  
**July 8, 2010**

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**What is the Puget Sound Science Update and why is it important?**

*The Puget Sound Science Update* will be the state-of-the-science document supporting the work of the Puget Sound Partnership to restore and protect the Puget Sound ecosystem. It will be a comprehensive reporting and analysis of science related to the ecosystem-scale protection and restoration of Puget Sound. The Update work will include a synthesis to aid in focusing science input into decisions about priorities and strategies for action. It will be a key to ensuring that credible science is used transparently to guide strategic policy decisions. The scope of the Update includes scientific understanding of the lands, waters, biota, and human social systems within the Puget Sound basin (see general outline attached). RCW 90.71.290 specifies the development of the initial version of the update.

The *Puget Sound Science Update* represents advancement in the development and use of science to support Puget Sound recovery in two important ways. First, the content of the *Puget Sound Science Update* will be developed following a process modeled after the rigorous peer-review process used by the Intergovernmental Panel on Climate Change (IPCC), in which small author groups produce draft assessment reports synthesizing existing, peer-reviewed scientific information on specific topics identified by policy leaders. These drafts are widely peer-reviewed before final reports are issued. Second, the Puget Sound Science Update will be published on-line following a wiki model, in which further refinements and expansion occur via a moderated dialog using peer-reviewed information. Subsequent review and editing of content will occur through a wiki-enabled dialog. Content eligible for inclusion must be peer-reviewed according to guidelines to be posted along with the section content.

**What is the Process and Schedule to Develop Initial 2010 Puget Sound Science Update?**

The Partnership statute calls for the Update to be completed by April 2010. Author teams were chosen through a competitive process and are responsible for developing content, engaging reviewers, and finalizing initial versions of key sections of the Update. Initial content for the first 2 sections, *Section 1: 'Understanding Future and Desired System States'*, *Section 2A: 'The Biophysical Condition of Puget Sound'*, and *2B: 'The Socio-Economic Condition of Puget Sound'* will be developed by April 2010. The initial content for the final sections, *Section 3: 'Impacts of Natural Events and Human Activities on the Ecosystem'*, and *Section 4: 'Effectiveness of Strategies to Protect and Restore the System'*, will be completed in summer 2010.

- Initial drafting of the document began in fall 2009 and will continue through spring 2010.
- Draft sections prepared by author teams will be peer reviewed in winter and spring 2010.
- Sections will be revised for initial wiki publication in spring and summer 2010.

## **What topics are addressed in the Puget Sound Science Update?**

The Science Update has four chapters.

### Section 1: Understanding Future and Desired System States

Section 1 introduces specific attributes of a healthy Puget Sound ecosystem in relation to the Partnership's six goals (i.e., healthy or sufficient species and food webs, habitats, water quality, water quantity, human health, and human well-being), provides a framework for selecting indicators of ecosystem health attributes.

### Section 2A: The Biophysical Condition of Puget Sound

Section 2A will characterize the biophysical condition of Puget Sound through the use of indicators based on criteria developed in Section 1.

### Section 2B: The Socio-Economic Condition of Puget Sound

Section 2B complements to Section 2A with a synthesis of what is known about how the status and condition of human well-being changes in response to changes in the natural condition of the Puget Sound region.

### Section 3: Impacts of Natural Events and Human Activities on the Ecosystem

Section 3 will present existing models describing what we know about the primary drivers of change in indicator status and the relative magnitude of pressures, or threats to the condition and state of both natural and human well-being indicators. The section will summarize what is known about natural drivers (e.g., climate, oceanographic processes, geology) and anthropogenic drivers (e.g., forest practices, urbanization and industrial development, agriculture and aquaculture practices, harvest, introduction of invasive species).

### Section 4: Effectiveness of Strategies to Protect and Restore the System

Section 4 will review, assess, and summarize the potential strategies investigated in past scientific research for positively affecting the biophysical and socioeconomic condition of the greater Puget Sound ecosystem and addressing identified threats to it. Of particular interest will be identifying strategies that reduce multiple threats to the ecosystem.

## **What is the Science Synthesis document?**

Once the individual update sections are completed, Partnership science staff and advisors will prepare a scientific synthesis. This document will present a synthesis of key findings and remaining scientific uncertainties and research needs. It is anticipated that the first synthesis will be completed by December 2010. A shorter, related summary will be prepared for policy and decision-makers.

## **How can I participate in updating the scientific information presented in the *Update*?**

Once the initial sections of the Update are posted to the wiki site, people with scientifically peer-reviewed information can add content to the sections through a mediated process on the wiki site, similar to the way Wikipedia works. A 'gatekeeper' will be responsible for checking the scientific validity of new content before it becomes part of the formal document. All comments and new scientific information will be transparent so that readers will be able to see the latest content of each section and also newly added content that is in review. We envision this being an on-going process, with new content being generated through both interest and expertise of the scientific community and also through policy-driven questions of interest to managers.

#### **How will the Partnership use the information in the Update and synthesis?**

Once the Update work is complete and available on the wiki site, it will be the "go-to" source for scientific support of the Partnership and regional recovery work. The Partnership anticipates that regional partners will rely on the Update to be the most current, agreed upon scientific information available to help guide efforts. The Science Panel and Partnership policy staff will then use the Update and synthesis as the basis for identifying the implications of current science for the adaptation of Action Agenda strategies and actions, which will then feed into budget, policy and program development processes. The specific timing for this adaptation is currently under discussion. These implications will be presented in a policy-focused companion document to the Update and synthesis. This product will be completed in the fall of 2010, in a timeframe similar to that of the synthesis.

#### **How does the work for the Update relate to the Partnership's 2010 work to complete portions of the Performance Management System under the Open Standards for Conservation?**

The Partnership has significant statutorily required performance and reporting responsibilities that will allow us to measure how well the Action Agenda is being implemented and whether the health of Puget Sound is improving as a result of our collective efforts. As part of the overall performance management system, the Partnership is using the Open Standards for the Practice of Conservation to integrate and logically align the Partnership's vision, mission, and goals with the strategies and near-term actions in the Action Agenda. Partnership staff is working closely with the Update project team to develop initial outlines for Update chapters that reflect the concepts and steps in the Open Standards. Staff will work with the authors as these chapters are completed to address potential inconsistencies. This will enable the Partnership to better integrate the products of the Update into the performance management system, and thus make the connection between science and decisions to adapt the Action Agenda priorities and strategies seamless and transparent.

#### **How will the work for the Update contribute to the guidance from the Partnership to the state agencies for the development of the 2011-13 budget?**

The statutory timeline for the Update of April 2010 is out of sync with the 2011-13 budget process. The work on the individual chapters will be underway at the same time as the budget is being prepared. The scientific synthesis that will pull the chapters together will be started after the state agency budget process is largely complete. As a result the current Update will be of some value in the development of the 2011-13 biennium budget, but will be more valuable in upcoming revisions to the Action Agenda strategies and actions that will drive additional budget processes.

The Partnership will be providing guidance for the 2011-13 biennium budget based in part on the products from the current work within the Open Standards process. In addition, Partnership staff is meeting with the Update author teams to determine what, if any, early information might be helpful for the other work that the Partnership needs to complete prior to the science synthesis.

**The content of the Update sounds like work that has already be done. How is this different and what value does it add now?**

The Update is a synthesis of scientifically peer-reviewed information on topics of interest to the PS Partnership and others in the region. A number of background papers have been produced in support of PSP work over the last few years, and any of that content that is peer-reviewed information will be reflected in the relevant sections of the Update. The Update will be unique in the breadth of scientific content it contains, the peer-review process ensuring scientific quality and consensus on the conclusions, and its reflection of latest and best available scientific information. The wiki format will allow additional peer-reviewed content to be added to the document relatively quickly, thus avoiding the problem of ‘door stop’ reports that become outdated by the time they go through review and publication processes.

A number of scientific research projects—data collection, analyses and modeling—are underway in this region, and as the results from such work are completed and peer-reviewed, they will be eligible for inclusion in the appropriate sections of the Update.

The PSP has set up an iterative performance management system—organized using the Open Standards process—that identifies ecosystem components of interest, primary threats to those components, and strategies designed to improve the ecosystem’s health through threat abatement. The iterative nature of this work is purposefully designed so that as new scientific information becomes available, adjustments or adaptations to the overall strategy can be made. The Update will provide one place where broadly supported, peer-reviewed scientific information can be found to support adaptation of the PSP strategy as we learn what works and what does not.

**Where do I track the Update progress and find out current information on it?**

The Partnership website has new page for the Science Update.

<http://www.psp.wa.gov/scienceupdate.php>